

## ABSTRACT OF THE DISCLOSURE

Methods and kits for analyzing a subject's genomic DNA to determine the subject's lineage. The methods comprise providing oligonucleotide primers for use in nucleic acid amplifications on a subject's genomic DNA. A first oligonucleotide primer includes a repeat sequence and at least one non-repeat nucleotide located on its 5' end. A second oligonucleotide primer starts within an amplification-permissive genetic distance on the 3' side of the repeat sequence in the subject's genomic DNA and may include an a-selective base, such as inosine. Additional oligonucleotide primers may be provided. The methods further comprise conducting nucleic acid amplifications on the subject's genomic DNA using the oligonucleotide primers of the invention to produce amplified DNA fragments based on repeat sequences found at the 5' end of the subject's genomic DNA and analyzing such amplified DNA fragments to determine the length of repeat sequences found in the subject's genomic DNA.

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